REMARKS

The Non-Final Office Action mailed October 18, 2007 considered claims 1-27. Claims 26 and 27 were rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1, 6, 10-14, 17, 18, 25-27 were rejected under 35 U.S.C. 102(b) as being anticipated by Phaal (US 6,006,269) hereinafter *Phaal*. Claims 7 and 19 were rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over *Phaal*. Claims 2, 3, 4, 5, 8, 9, 15, 16, 23, and 24 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Phaal* as applied to claims 1 and 14 above, and further in view of Garg et al. (US 2002/0138613) hereinafter *Garg*.[1]

By this amendment claims 1, 6, 7, 10, 11-14, 19-21, and 25-27 are amended and claim 28 is new. [2] Accordingly, claims 1-28 are pending, of which claims 1, 14, 26, and 27 are the independent claims at issue.

The invention is generally directed to regulating client requests in an electronic messaging environment. For example, claims 14 recites a method for regulating client requests so as to provide an improved user experience when the messaging server is experiencing increased load. Claim 1 defines receiving a client data request from a client. Next, claim 1 defines determining that the computer system is unable to process the client data request, subsequent to receiving the client data request. Claim 1 also defines an act of adaptively generating a wait hint. The adaptively generated wait hint includes an indicated wait time indicating an amount of time that the client is to wait before resending the client data request to thereby reduce the load at the computer system. The adaptively generated wait hint is generated by a wait hint generation algorithm. The wait hint generation algorithm is configured to adaptively generate a wait hint for each attempt in a plurality of attempts to send the data request based on how many prior attempts to send the data request have occurred, up to a specified number of attempts after which the data is to be processed. Lastly, claim 1 defines sending a server response that includes the adaptively generated wait hint to the client.

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[1] Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

[2] Support for the amendments to the claims are found throughout the specification and previously presented claims, including but not limited to paragraphs [0038]-[0044], [0047]-[0048], [0055]-[0056] and Figures 1, 2, and 4.

Claim 27 is a computer program product claim corresponding to method claim 14. Claim 1 is a claim similar to claim 14 from a client perspective. Claim 26 is computer program claim corresponding to method claim 1.

Applicants respectfully submit that the cited art of record does not anticipate or otherwise render the amended claims unpatentable for at least the reason that the cited art does not disclose, suggest, or enable each and every element of these claims.

Phaal describes an admission control system with message admitted or deferred for re-submission at a later time on a priority basis. If a desired maximum load for a server is exceeded when a message is received the message is deferred until a later time (Col. 6, ll. 1-15). The later time can be calculated to be a time when it can be expected that the deferred message can be processed. (Col. 6, ll. 27-29). The later time can be set to a time when, based on compiled statistics the server is typically less strained, an "appointment" time, or a minimum predetermined amount of time. (Col. 6, ll. 30-49). At the server, after the minimum predetermined time, the server can accept the message as a priority message if received within a defined interval of time. (Col. 6, ll. 45- 49). Upon deferral, a message is given priority status so that the message has priority over other non-priority messages. (Col. 6, ll.50 -52). Designation of priority includes tracking other data such as a "cookie" for the message. (Col. 6. ll. 53- 54). Priority messages are designated to be received and processed.

A deferral time along with other deferral data (e.g., cookie, web page) for resubmission of the message is sent to the client. (Col. 11, ll. 35-49). The client counts down based on the deferral time and upon reaching zero can automatically resend the message. (Col. 11, ll. 65 – 66). Alternately, a dialog box can be presented to a user when the countdown reaches zero (Col. 11. l. 67 – Col. 12, l. 2). The user can choose to resubmit or not resubmit the message from the dialog box. (Col. 12. ll. 3-15). However, there is no mention of the client randomizing the count down based on the deferral time.

Thus, *Phaal* generally contemplates that a message is received, given priority, and deferred until (and possibly scheduled for) a time that processing is more likely to occur. However, it is possible that a message can be deferred multiple times if, at the time a priority message is received, the server is at maximum load and is processing only priority messages. If a priority message is again deferred, it is deferred in the same manner as a non-priority message (and possible increased in priority). (Col. 9, ll. 40-44). For example, referring to Table I, if a non

priority message is deferred for 300 seconds and then received as a priority message and deferred again, the message will again be deferred for 300 seconds. However, the server does not adapt message deferral based on the number of times the message has been previously deferred. There is little, if any, reason for *Phaal* to even consider adaptive deferrals, since deferred messages are designated to be processed based on priority the second time they are received (and not differed multiple times).

Phaal includes general statements that the scheduler has many possible implementations and can operate in a number of ways. (Col. 6, ll. 29-30 and Col. 10, ll. 24-25). Applicants submit that interpretation of the general statements related to the scheduler is too broad. *Phaal* does not even mention connection speed. Thus, connection speed could not be used in determining when to schedule a deferral. Further, due to the magnitude of the times utilized in *Phaal* being in the hundreds of seconds, connection speed (which could vary transmission times by a few seconds at most) would have limited if any impact on scheduling. Accordingly, Applicants submit that *Phaal* does not teach adapting a deferral time based on connection speed.

Garg describes notifying a client when resources are available to process a client request. ([0008]). When service is denied to a client, the server can queue a request and determine a time delay when requests can be processed. ([0018]). Requests can be implemented as information requests, data requests, or other appropriate type requests. ([0018]). Requests can request multimedia real-time downloads, large file transfers, or an interactive session. ([0018]).

Thus, *Garg* mentions specific types of requests and requested data. However, the Office Action's assertion that *Garg* teaches sending "any type of request" (assumingly based on these statements) interprets *Garg* too broadly. *Garg* does not mention nor relate in anyway to synchronizing server data at a client. Further, *Garg* does not mention use of Remote Procedure Calls ("RPC") to effectuate notification nor data delivery. Additionally, *Garg* does not mention the use of an (RPC or any other type) buffer to indicate a wait time to a client.

Accordingly, the cited art fails to teach or suggest, either singly or in combination "an act of adaptively generating a wait hint, the adaptively generated wait hint including an indicated wait time indicating an amount of time that the client is to wait-before resending the client data request to thereby reduce the load at the computer system, the adaptively generated wait hint generated by a wait hint generation algorithm, the wait hint generation algorithm configured to adaptively generate a wait hint for each attempt in a plurality of attempts to send the data request

based on how many prior attempts to send the data request have occurred, up to a specified number of attempts after which the data is to be processed", as recited in claim 14, when viewed in combination with the other limitations of claim 14. For at least this reason claim 14 also patentably defines over the art of record. For at least this same reason claim 27 also patentable defines over the art of record.

The cited art also fails to teach or suggest, either singly or in combination "an act of receiving a server response including an adaptively generated wait hint, the adaptively generated wait hint being an indication that the messaging server was unable to process the data request, the adaptively generated wait hint generated by a wait hint generation algorithm, the wait hint generation algorithm configured to adaptively generate a wait hint for each attempt in a plurality of attempts to send the data request based on how many prior attempts to send the data request have occurred, up to a specified number of attempts after which the data request is processed at the message server, each wait hint including an indicated wait time indicating an amount of time the computer system is to wait before attempting to resend the data request", as recited in claim 1 when viewed in combination with the other limitations of claim 11. For at least this reason claim 11 also patentably defines over the art of record. For at least this same reason claim 26 also patentable defines over the art of record.

Since each dependent claim depends from claim 1 or claim 14 each of the dependent claims are also patentably defines over the art of record at least for the same reason as their corresponding based claim respectively. However, many of the dependent claims also independently distinguish over the cited art. For example, the cited art fails to teach or suggest, either singly or in combination "varying the indicated wait time between successive adaptively generated wait hints in accordance with the wait hint generation algorithm", as recited in claim 19. Likewise, the cited art fails to teach or suggest, either singly or in combination "receiving an adaptively generated wait hint having indicated wait time differing from the indicated wait hint time the wait hint generation algorithm is configured to generate for other attempts, in the plurality of attempts, to send the data request", as recited in claim 28.

The specification has been amended such that all mentioned reference signs are now included in the specification.

The claims have been amended to recite a "messaging interface" as depicted in Figure 1. Thus, the drawings now show every feature of the invention specified in the claims.

Line 6 of Claim 27 has been amended to remove a comma.

For prosecution efficiency reasons, claims 26 and 27 have been amended to recite "computer storage media". However, Applicants do not acquiesce to the assertion in the Office Action that a carrier wave or other forms of signals lack physical properties for purposes of 35 USC 101.

In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at 801-533-9800.

Dated this 18th day of January, 2008.

Respectfully submitted,

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